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| APPLICATION NO.                 | FILING DATE   | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|---------------------------------|---------------|--------------------------|------------------------|------------------|
| 10/771,520                      | 02/04/2004    | Christiaan H.J. Koevoets | 141682-1               | 2884             |
| 75                              | 90 04/13/2005 |                          | EXAM                   | INER             |
| Henry H. Gibs                   | son .         |                          | WOODWARD, ANA LUCRECIA |                  |
| GE Plastics One Plastics Avenue |               |                          | ART UNIT PAPER NUMBER  |                  |
| Pittsfield, MA 01201            |               |                          | 1711                   |                  |
| •                               |               |                          |                        | _                |

DATE MAILED: 04/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |  |  |  |  |
|--|--|---|--|--|--|--|
|  | 10/771,520   | KOEVOETS, CHRISTIAAN  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |  |
|  | Ana L. Woodward  | 1711  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | Marie  | ·   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 'IS SET TO EXPIRE ' MON  6(a). In no event, however, may a reply be tim  within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | s will be considered timely.<br>the mailing date of this communication.<br>O (35 U.S.C. § 133). |  |  |  |  |
| Status   | 11/2211  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on   | 14/2004  |   |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This   | This action is <b>FINAL</b> . 2b) This action is non-final.  |   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |   |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |
| 4) Claim(s) 1-43 is/are pending in the application   | n.   |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |
| 6) Claim(s) /-/5 is/are rejected.  |  |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  | 7) Claim(s) is/are objected to.  |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.  |   |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |  |   |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |   |  |  |  |  |
| 11) The oath or declaration is objected to by the Ex   | aminer. Note the attached Office   | Action or form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119   | •  |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign  | priority under 35 U.S.C. § 119(a)  | -(d) or (f).  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |  | •   |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |   |  |  |  |  |
| 3. Copies of the certified copies of the prior   |  | d in this National Stage  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  |  |   |  |  |  |  |
| See the attached detailed Office action for a list t   | or the certified copies not receive  | a.  |  |  |  |  |
|  |  |   |  |  |  |  |
| Attachment(s)  |  | •   |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) 🔲 Interview Summary   |   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da  | te<br>atent Application (PTO-152)   |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 6) Other:  | atent Application (FTO-192)   |  |  |  |  |
| S. Patent and Trademark Office TOL-326 (Rev. 1-04) Office Act  | tion Summary   | Part of Paper No./Mail Date 405   |  |  |  |  |

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,063,844 (Barren et al).

Barren et al disclose a composition comprising from 15 to 85 parts by weight of a branched polycarbonate, reading on the presently claimed polycarbonate, and from 15 to 85 parts by weight of a rubber modified graft copolymer that contains a discontinuous elastomeric phase dispersed in a continuous rigid thermoplastic phase, wherein at least a portion of the rigid thermoplastic phase is chemically grafted to the elastomeric phase, embracing the presently claimed rubber modified thermoplastic resin. Suitable polycarbonates include those derived from applicants' preferred dihydroxy aromatic hydrocarbons per claims 2-6. See, for example, the divalent radicals containing two aromatic rings joined by alkylidene linkages substituted by halo groups (column 3, lines 30-35), the divalent radicals according to formula (III), etc.

Preferably, the polycarbonates have weight average molecular weights of from about 10,000 to more than 200,000 (column 4, lines 26-29). The elastomeric phase can be derived from alkyl(meth)acrylate monomers, as required by claim 13, and from polyethylenically unsaturated monomers, as required by claim 16 (column 5, lines 53-57, column 6, lines 40-47, etc). The elastomeric phaseshave weight average particle sizes of 50 to 800 nm (column 7, lines 21-25).

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The amount of grafting that takes place between the rigid and elastomeric phases is from 10 to 90 weight percent (column 8, lines 13-20). In addition to vinyl aromatic and unsaturated nitrile monomers, the rigid phase can optionally contain alkyl (meth)acrylate monomers (column 7, lines 34-44, etc.). Stabilizers and other conventional additives are incorporated into the composition. With respect to applicants' embodiment requiring the presence of an additional thermoplastic resin, it is noted that the composition may contain SAN or additional polymers such as fluoropolymers (see examples).

In essence, the disclosure of the reference differs from the present claims in not expressly exemplifying a rubber modified graft copolymer wherein the rigid thermoplastic phase further contains units derived from (meth)acrylate monomers. In this regard, it is noted that the reference expressly teaches that the rigid phase can be derived from one or more monomers selected from alkyl (meth)acrylates, vinyl aromatics and unsaturated nitriles (column 7, lines 34-38). Accordingly, it would have been obvious to one having ordinary skill in the art to have used a rubber modified graft copolymer containing a rigid phase derived (meth)acrylate monomers in addition to the exemplified styrene and acrylonitrile monomers with the reasonable expectation of success since only its additive effect would have been expected. Absent evidence of unusual or unexpected results, no patentability can be seen in the presently claimed subject matter.

## Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-211-9197 (toll-free).

Ana L. Woodward

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